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DIRECTOR OF CENTRAL INTELLIGENCE
Security Committee

Computer Security Subcommittee

DCISEC-CSS-M104
12 September 1977

COMPUTER SECURITY SUBCOMMITTEE

of the

DIRECTOR CENTRAL INTELLIGENCE

SECURITY COMMITTEE

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Minutes of Meeting
Held at CIA
McLean, Va.
9 September 1977

1. The one-hundred and fourth meeting of the Computer Security Subcommittee of the Director of Central Intelligence Security Committee was held between 0930 and 1300 hours on 9 September 1977 at CIA, 25X1
In attendance were: 25X1

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Mr. Robert Cameron, Navy Member
Mr. James E. Studer, Army Member
Mr. George S. Herrmann, State Member
Mr. Robert K.Kyanko, U.S.S.S./Treasury Member

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Mr. Thomas Walczykowski, FBI Member
Capt. Ron Pherigo, Air Force Member

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Mr. Herman O. Lubbes, Navy
Mr. Thomas E. Bozek, DCA

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LCDR Dean H. Beyer, OJCS

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Mr. J. D. Schenhen, U.S.S.S/Treasury
Mr. John D. Arbogast, FBI
Mr. Steve Walker, ARPA

2. The security level of the meeting was TOP SECRET SI.

3. The Chairman stated that this meeting is to consist of briefings on the R&D computer security programs of the Advanced Research Project Agency (ARPA) and the Defense Communications Agency (DCA).

Mr. Steve Walker is the guest speaker representing ARPA and Mr. Thomas Bozek is the DCA guest speaker.

Mr. Walker introduced the membership to the ARPA Computer Security Program with an overall viewgraph depicting the program objectives. The objectes are as follows:

- Secure Unix Effort
  DEC PDP 11
  Honeywell Level 6

- Secure VM370 Effort

- Secure Military Message System

- Network Security
  Multi-address PLI
  End-to-End Encryption Demonstration

- Hardware Refinements
  Security Protection Module

An effort to develop techniques to ease design/implementation of secure systems via:

- Program Verification

- Euclid Language Definition

Mr. Walker explained in detail each of these efforts. The Secure Unix effort is being conducted on a PDP/11 mini-processor. The production model of a Secure Unix is expected to be available in August 1979. The Honeywell Company is expected to implement the B-5 specifications, at their expense, on the level 6 processor.

The Secure VM370 project is an effort to develop a certifiably secure version of the IBM VM370 operating system. The aim is to guarantee separation of virtual machine provided by VM370. This is a three year effort begun in the Spring 1976. The program consists of the following areas and effort.

- Kernel design
- Kernel implementation
- Verification - evaluation
- Binchmark performance testing

This contract was awarded to the System Development Corporation and a production version is anticipated in 1979.

Another project ARPA is engaged in with the Navy is the Military Message Experiment. The objective of this effort is to determine the utility of interactive message communications in a military environment. A second goal is to determine how to create a secure transaction oriented system with a reasonable user interface. In January 1977, a PDP/10 was installed at CINCPAC and the experiment is expected to run for at least two years.

ARPA was instrumental in the design of a secure private line interface for networks. It allows classified data to be transmitted over the ARPA network. In August 1975 the PLI was "Tempest" certified and in February 1976 the first installation occurred at the naval facilities in California.

ARPA is interested in aids for building secure systems. One such aid is EUCLID, a language for writing verifiable system level software. Results are expected in April 1978. Compilers are being developed with results expected in January 1979. Another aid is in the area of software evaluation. The Lawrence Livermore Labs produced RISOS and the results are available at NSA. The ISI protection analysis is generalized techniques for detecting security flaws by searching for conditions surrounding the flaw.

4. Mr. Thomas Bozek, Defense Communications Agency (DCA) presented a briefing on DCA's approach to computer security. The multi-level computer security problem is viewed as having three basic areas that need to be addressed. 1)Protection; 2)Assurance; 3)Assessment.

The protection area concerns the local and global environments projects such as secure front end processors, Blacker, and Secure Unix are being examined.

The assurance part of the problem deals with auditing logs and surveillance. Surveillance should be accomplished in real time for purposes of detection and abuse. The assessment area is concerned with guidelines, development tools, and system evaluation and maintenance.

To achieve these goals, DCA is involved with projects such as WWMCCS, Level 66-GECOS6; Multics H-6000, Virtual Machine Monitors and Secure Subsystems.

5. The Chairman postponed other business until the next meeting due to the majority of the members having other appointments scheduled for the remaining business day.

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Executive Secretary
Computer Security Subcommittee